

Recombinant Human IL36G Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50531

Size: 10ug, 100ug

Protein Name: Interleukin-36 gamma (IL-1-related protein 2) (IL-1RP2) (Interleukin-1 epsilon) (IL-1 epsilon) (Interleukin-1 family member 9) (IL-1F9) (Interleukin-1 homolog 1) (IL-1H1)

Synonym: IL36G, IL1E, IL1F9, IL1H1, IL1RP2, UNQ2456/PRO5737

UniProt ID: Q9NZH8

UniProt Link: www.uniprot.org/uniprotkb/Q9NZH8/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 169 AA

Molecular Weight: 19 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MRGTPGDADGGGRAVYQSMCKPITGTINDLNQQVWTLQGQNLVAVPRSDSVTPVTVAVITCKYPEA
LEQGRGDPIYLGIQNPMECLYCEKVGEPQLQLKEQKIMDLYGQPEPVKPFIFYRAKTGRTSTLESV
AFPDWFIASSKRDQPIILTSELGKSYNTAFELNIND

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Interleukin-36 gamma (IL-1-related protein 2) (IL-1RP2) (Interleukin-1 epsilon) (IL-1 epsilon) (Interleukin-1 family member 9) (IL-1F9) (Interleukin-1 homolog 1) (IL-1H1) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Cytokine that binds to and signals through the IL1RL2/IL-36R receptor which in turn activates NF-kappa-B and MAPK signaling pathways in target cells. Part of the IL-36 signaling system that is thought to be present in epithelial barriers and to take part in local inflammatory response; similar to the IL-1 system with which it shares the coreceptor IL1RAP. Seems to be involved in skin inflammatory response by acting on keratinocytes, dendritic cells and indirectly on T-cells to drive tissue infiltration, cell maturation and cell proliferation. In cultured keratinocytes induces the expression of macrophage, T-cell, and neutrophil chemokines, such as CCL3, CCL4, CCL5, CCL2, CCL17, CCL22, CCL20, CCL5, CCL2, CCL17, CCL22, CXCL8, CCL20 and CXCL1; also stimulates its own expression and that of the prototypic cutaneous pro-inflammatory parameters TNF, S100A7/psoriasin and inducible NOS. May play a role in pro-inflammatory responses during particular neutrophilic airway inflammation: activates mitogen-activated protein kinases and NF-kappa B in primary lung fibroblasts, and stimulates the expression of IL-8 and CXCL3 and Th17 chemokine CCL20 in lung fibroblasts. May be involved in the innate immune response to fungal pathogens, such as *Aspergillus fumigatus*.

Subcellular Localization: Cytoplasm . Secreted . Note=The secretion is dependent on protein unfolding and facilitated by the cargo receptor TMED10; it results in protein translocation from the cytoplasm into the ERGIC (endoplasmic reticulum-Golgi intermediate compartment) followed by vesicle entry and secretion.

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.